

REMARKS

Favorable reconsideration of this application is respectfully requested.

Initially, applicants note with appreciation the acknowledgement of the references cited on the previously submitted Information Disclosure Statements by providing the returned forms PTO-1449. However, applicants note that on one of the forms reference AW in the "Other References" section is initialed but also has an apparently inadvertent line placed through it. Applicants wish to make sure that reference is printed on the face of the patent as it has been acknowledged as considered, and thereby clarification of that matter if needed is requested.

Claims 1-27 are pending in this application. Claims 1-10, 17, 19-23, 26, and 27 stand withdrawn from consideration as directed to non-elected inventions. Claim 11 was rejected under 35 U.S.C. § 112, first paragraph. Claims 11, 12-16, 18, and 24 were objected to for informalities. Claim 11 was rejected under 35 U.S.C. § 102(b) as anticipated by U.S. patent 6,229,561 to Son et al. (herein "Son"). Claims 12-16 and 18 were rejected under 35 U.S.C. § 103(a) as unpatentable over Son. Claims 11-16 and 18 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. patent 5,966,167 to Nose et al. (herein "Nose"). Claims 24 and 25 were rejected under 35 U.S.C. § 103(a) as unpatentable over Son in view of U.S. patent 6,611,243 to Moseley et al. (herein "Moseley"). Claims 24 and 25 were rejected under 35 U.S.C. § 103(a) as unpatentable over Nose in view of Moseley.

Addressing now the rejection of claim 11 under 35 U.S.C. § 112, first paragraph, and the objection to claims 11, 12-16, 18, and 24-25, that rejection and objection are traversed by the present response.

First, applicants note there appears to be a misunderstanding with respect to the features recited in the claims, such as in claim 11. Specifically, one issue raised in the Office

Action was that as the claims recited dividing an image in a time-dividing manner, it was unclear as to what further separation would be needed.

In response, applicants note the claims as currently written are directed to a method or apparatus for a three-dimensional image display. With reference to Figure 18 in the present specification as a non-limiting example, in such a device multiple stripes (spatially-divided image display regions) are arranged in a display panel, and two or more images are displayed in each of the stripes at different timings (in a time dividing manner). As a more concrete example, as shown in Figure 18, each stripe contains symbols (L3, L4) or (L1, L2) on the display panel that represent a spatially-divided display image. In each stripe (spatially divided image display region), two images ((L1 and L2) or (L3 and L4)) are displayed at different timings (in a time-dividing manner). Thus, input images are displayed in both a spatially-divided and time-divided manner.

One feature of the claimed invention is to change the light path of the stripe image separated by a separating device, e.g. the lenticular lens LL in Figure 18, using a deflector, e.g. the deflector LC in Figure 18, to guide the images ((L1 and L2) or (L3 and L4)) towards different viewpoints. At a certain time, two spatially-divided images (for example L1 and L3) are guided to two different eyes (OB1 and OB3), and at a next timing two spatially-divided images (for example L2 and L4) are guided to two different eyes (OB2 and OB4).

In such ways, images ((L1 and L2) or (L3 and L4)) are output from the same image display region at different timings and are guided to different viewpoints by the deflector. In the example noted in Figure 18 in the present specification, two stripes are used to display four images, and a display timing is shifted for the two images allocated to each stripe. The deflector operates synchronized with the image switching timing of each stripe. With such an arrangement a pixel ratio allocated to each eye is one-half of the whole.

Applicants also note the above-noted operations are fully discussed in the present specification with respect to Figure 18, see for example page 68, line 4 through page 69, line 2.

The claimed invention provides benefits over a conventional technique for example in which four stripes (spatially divided image display regions) are required for four images L1 through L4, and those images are separated from each other by a lenticular lens towards four different eyes. In such a conventional technique, a pixel ratio allocated to each eye is only a quarter of the whole.

Independent Claims 11 and 12 are rewritten by the present response to clarify the language therein. The amendments to Claims 11 and 12 are also believed to clarify the language noted as unclear in the Office Action, particularly in view of the above discussion. However, applicants note that in view of the above discussion, the claims are directed to utilizing both a spatially-dividing and a time-dividing operation.

Further, each of claims 15 and 16 is amended by the present response to clarify the language therein. Also, the claims still recite the phrase "light images", as that phrase is believed to be more proper than "image light", in view of the above discussion with respect to images L1-L4 being separated.

In view of the above comments and the presently submitted claim amendments, each of the claims is believed to be in full compliance with all the requirements under 35 U.S.C. § 112, first paragraph, to address the claim objections, and to clearly set forth the claimed features.

Addressing now the prior art rejections based on Son, Nose, and each further in view of Moseley, those rejections are also traversed by the present response.

Applicants respectfully submit none of the cited art discloses or suggests the claimed operations in which multiple images are displayed in different stripes in a spatially-divided

manner, and two or more images are switched in each of the spatially-divided image display regions in a time-dividing manner, as set forth in the claims. Applicants believe the outstanding Office Action did not fully consider such features as the outstanding Office Action did not fully understand the claims as previously written. However, in view of the presently submitted claim amendments, applicants believe the claims clearly recite features neither taught nor suggested by the applied art.

Son merely discloses a three-dimensional image system in which images are output at different timings. Thus, Son discloses a time-dividing operation. However, Son does not disclose any type of separating light images from image display regions from one another, as recited in amended Claims 11 and 12. That is, Son does not disclose any spatial separation. In Son the images output at different timings are guided to a same eye. In contrast, the claims separate the images to different viewpoints. Again with reference to Figure 18 in the present specification as a non-limiting example, different images L1 and L2 output from a stripe in a time dividing manner are guided to different eyes by a deflector, which clearly differs from the disclosure in Son.

In such ways, the claims clearly distinguish over Son.

Nose is directed to a stereoscopic display apparatus in which a variable apex angle prism is used. However, in Nose images deflected by the prism are intended to be guided to a same eye. In that way, the prism in Nose differs from the claimed deflector as the claimed deflector deflects images output from a stripe and separated by a separating element towards different viewpoints. That is, in the claims images output from an image display region are deflected and separated towards different viewpoints. Nose fails to teach or suggest any such operation.

In such ways, the claims clearly distinguish over Nose.

Moreover, no teachings in Moseley are believed to overcome the above-noted deficiencies of Son or Nose.

In view of these foregoing comments, applicants respectfully submit each of amended independent claims 11 and 12, and the claims dependent therefrom, patentably distinguish over the applied art.

Applicants also note withdrawn claims 19-23, 26, and 27 are pending in this application. Those withdrawn claims all depend directly or indirectly from independent claim 12. Thus, independent claim 12 is generic to each of withdrawn claims 19-23, 26, and 27. As independent claim 12 is believed to be allowable for the reasons discussed above, the reinstatement and allowance of claims 19-23, 26, and 27 is believed to be proper.

Thus, in view of the present response, applicants respectfully submit each of claims 11-27 is in condition for allowance.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Attorney of Record
Registration No. 25,599

Surinder Sachar
Registration No. 34,423

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)

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